REMARKS/ARGUMENTS

These remarks are made in response to the Office Action of December 2, 2003 (Office Action). As this response is not timely filed within the 3-month shortened statutory period, a one-month extension is herein requested. The appropriate fee for the extension accompanies this response.

In paragraph 2 of the Office Action, the Oath and Declaration were objected to as not conforming with 37 C.F.R. § 1.67(a). In response, a new Oath and Declaration have been enclosed that explicitly acknowledge the duty to disclose information under 37 C.F.R. § 1.56. Accordingly, withdrawal of the 37 C.F.R. § 1.67(a) objection to the Oath and Declaration is respectfully requested.

In paragraphs 3 and 4 of the Office Action, FIG. 3A was objected to under 37 C.F.R. § 184(p)(3) for referencing "324", "326", "330", "334", and "336" not mentioned in the description. In response, the description has been amended so that the referenced items are included. Accordingly, withdrawal of the 37 C.F.R. § 1.84 objections are respectfully requested.

In paragraph 5, the specification has been objected to for using the terms JAVA and JAVA BEAN without capitalizing the terms to indicate trademark status. In response, the specification has been amended to capitalize trademarks when they first appear to respect the proprietary nature of the marks. Accordingly, withdrawal of the paragraph 5 objection is respectfully requested.

In paragraph 6, defining the acronym UDP as Universal Datagram Protocol has been objected to as the more commonly utilized acronym User Datagram Protocol would promote clarity within the submission. In response, the acronym has been redefined as suggested. Accordingly, withdrawal of the paragraph 6 objection is respectfully requested.

In paragraphs 7-9, claims 1, 10, 7, and 21 have been objected to for minor informalities. Applicants have amended the claims to correct these informalities. Accordingly, withdrawal of the claim objections of the ascribed paragraphs is respectfully requested.

In paragraphs 10 and 11, claims 7, 12, and 21 have been rejected under 35 U.S.C. § 112 paragraph 2 for being indefinite. In response, claims 7 and 21 have been amended to exclude

references to the UDP connectionless transport protocol. Claim 12 has been amended so that it does not contain a trademark. Accordingly, withdrawal of the 35 U.S.C. § 112 paragraph 2 rejections are respectfully requested.

In paragraphs 12 and 13, claims 1-6, 10, 13-20, and 24-31 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Number 5,920,725 to Ma *et al.* (Ma). In paragraph 15, claims 7 and 21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ma in view of Andrew S. Tanenbaum, "Computer Networks," 1996, Prentice Hall PTR, third ed. (Tanenbaum). In paragraph 16, claims 8, 9, 11, 22, and 23 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Ma in view of Applicants' Admitted Prior Art. In paragraph 17, claim 12 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Ma in view of Official Notice.

In response, Applicants have amended claims 1, 10, and 15 to clarify that the updates conveyed to the configuration client from the configuration server are client position specific. Support for this amendment can be found on page 12, line 2-10, where the configuration server 201 is queried based upon a position identifier. That is, the response to the queries contain a list of application components 205 to be installed in the client position 207 that are unique to the client position 207. Updates can be transmitted only to those client positions 207 containing application components 205 to which the update is directed as noted on page 13, lines 8-10. Additional support for these amendments can be found within FIGS. 3A and 3B of the Applicants' submission.

Claims 2, 10, and 16 have been amended to clarify that active application components can be terminated responsive to an update before the active application components self-terminate. Support for these amendments can be found on page 14, lines 10-19 and within FIGS. 3A and 3B.

Claim 11 has been amended to clarify that application components to be installed in the client are determined by querying a configuration server as the client undergoes bootstrap. These application components are installed within the client and updated as per the inventive arrangements detailed within the Applicants' submission. Support for these amendments can be

found on page 9, lines 11-17, on page 11, lines 12-20, and within FIGS. 3A and 3B of the Applicants' submission.

Claim 12 has been amended to clarify that the active application component can be a process executing in the background of the platform, as supported within FIGS. 3A and 3B of the Applications' submission.

New claims 32 and 33 have been added that include limitations based upon the above claim amendments. New claims 32 and 33 are supported by FIGS. 3A and 3B of the Applicants' submission. No new matter has been added as a result of the claim amendments presented herein.

Prior to addressing the rejections on the art, a brief review of the Applicants' invention is in order. The Applicants claimed and disclosed subject matter teaches a method, a system, and an apparatus that distributes real-time application updates to client computers in a client-specific fashion. Configuration information can be included within a configuration server for the client computer that is accessed when the client computer undergoes bootstrap, as described on page 9, line 11 and illustrated in FIGS. 3A and 3B of the Applications submission. The configuration server can provide appropriate configuration information to the client, which the client can use when booting. Changes to information in the configuration server can be applied to non-active clients during their next boot-up cycle.

Active clients can receive an update notification from the configuration server. The updates can be immediately applied to the active clients by terminating currently executing application components that have been updated. Once the execution has been terminated, the application components can be updated and the updated application components can be executed. Only application components affected by the update need to be re-initialized. The platform upon which the update occurs does not need to be re-booted.

Turning to the rejections on the art, claims 1, 10, and 15 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Ma. Ma fails to disclose a system where realtime updates can be performed in a client-specific manner. Ma handles changes and/or updates in a client independent fashion, by changing class definitions. Changes to a class definition

automatically propagate to all clients utilizing that class. Client specific customizations and user specific options are not possible utilizing the teachings of Ma.

In contrast, the configuration server 201 of FIG. 2 of the Applicants' submission can provide application components to client position 207 in a fashion specifically tailored to the client position 207. This information can be uniquely provided to each client, as indicated by FIGS. 3A and 3B and throughout the submission when the identified applications components are selected based upon client position identity. Different option settings, screen definitions, server addresses, and other such client specific settings can be stored in the configuration server 201 and conveyed to appropriate client positions 207, as indicated on page 12, lines 18-19 of the Applicants' submission. According, Ma fails to anticipate the Applicants' claimed invention, therefore the Applicants respectfully request that the 35 U.S.C. § 102(b) rejections be withdrawn.

Regarding claims 2, 10, and 16, the Applicants teach that active application components are to be terminated before the active application components self-terminate so that updates can be applied to the client. In contrast, Ma teaches at column 9, lines 6-43 and column 10, lines 39-66 that all instances of a class are to complete their tasks and naturally expire (reference count reaching 0) before updates can be applied to a client. According, Ma fails to anticipate the Applicants' invention as specified in claims 2, 10, and 16, therefore the Applicants respectfully request that the 35 U.S.C. § 102(b) rejections be withdrawn.

Regarding claim 11, Ma fails to disclose a system where application components are determined at bootstrap based upon information contained within a configuration server. Instead, Ma discloses a method and a system for placing class definitions defining the structure of software objects within a non-volatile memory of a centralized data store. The data store includes identifiers for binary files for class instantiation based upon these definitions. When distributed client applications instantiate software objects, the class definitions of the centralized data store are used. (as noted between column 5, lines 62 and column 6 lines 6 of Ma.) In Ma, the centralized data store is accessed as applications executing upon a client need new instances of a class. Ma fails to teach that a configuration server is to be accessed when the client undergoes bootstrap.

In paragraphs 14-17 of the Office Action, claims 7-9, 11-12, and 21-23 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ma in view of Tanebaum, Applicants' Admitted Prior Art, or Official Notice. The Applicants respectfully disagree.

Applicants disclose a system where a client, upon startup, queries a configuration server for configuration information. This information can be uniquely provided to each client, as indicated by FIGS. 3A and 3B and throughout the submission when the identified applications components are selected based upon client position identity. That is, the configuration server 201 of FIG. 2 can provide application components to client position 207 in a fashion specifically tailored to the client position 207. Different screen positions, user established options, and the like can be stored in the configuration server 201.

In contrast, Ma handles changes in a client independent fashion, by changing class definitions. Changes to a class definition automatically propagate to all clients utilizing that class. Client specific customizations and user specific options are not possible utilizing the teachings of Ma Therefore, Ma teaches away from performing client-specific updates and instead inherently updates all clients, which may not even be explicitly identified, via a change of class definition that affects all software objects of the updated class type.

Additionally, Applicants disclose that the execution of active application components are to be terminated before the active application components self terminate so that updates can be applied to the client. Ma fails to teach or suggest that application components should be explicitly terminated. Instead, Ma teaches that all instances of a class are to complete their tasks and to naturally expire. Only when no active instances of a class exist within a client, can the class definition be updated for that client, as noted at column 9, lines 6-43 and column 10, lines 39-66 of Ma.

Further, the application components of the Applicants' invention can be any variety of software objects, configuration files, shared libraries, processes, and the like. The method used by the Applicants of loading the application component at client initialization and updating the configuration server handles all of these types of application components as described in the Applicants' submission. In contrast, the teachings of Ma can only apply to software objects having class definitions. Other software objects, like background operating system processes,

which are executed before applications are initialized cannot be handled using the teachings of Ma.

Consequently, Ma fails to teach or suggest a client specific system for updating application components in realtime. Other references provided within the Office Action, such as Tanebaum, fail to cure these deficiencies. Accordingly, the Applicants' claimed invention is not obvious in view of Ma in further view of Tanebaum, Official Notice, or any references contained within the Applicants' submission. The Applicants respectfully request that the 35 U.S.C. § 103(a) rejections be withdrawn. Additionally, for the reasons provided above, new claims 32 and 33 are believed to be patentable over cited art.

In light of the above, Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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